



IDAHO DEPARTMENT OF HEALTH & WELFARE

Bureau of Community and Environmental Health

Result of the ATSDR Air Health Consultation for the Eastern Michaud Flats (EMF) Contamination Site

What is ATSDR?

The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency in Atlanta, Georgia. The Agency's mission is to prevent harm to human health from contact with dangerous substances released from Superfund sites. A Superfund site is a serious, uncontrolled or abandoned hazardous waste site.

What has ATSDR done at the EMF contamination site?

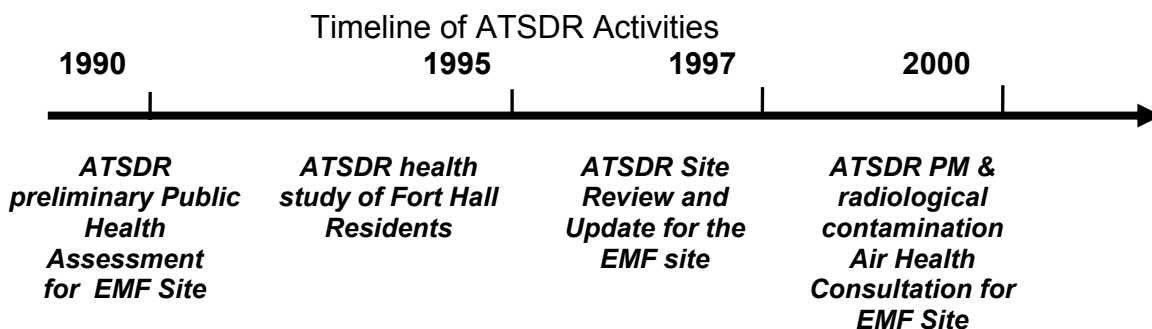
The Shoshone-Bannock Tribes and residents of Chubbuck and Pocatello raised concerns about the number of cases of asthma and upper respiratory infections in their communities. In response to these concerns ATSDR published an air health consultation. The ATSDR health consultation gives information about how people's health may be affected by air quality in Chubbuck, Pocatello, and the Fort Hall Indian Reservation. The ATSDR health consultation found that poor air quality in these areas is due in part to air pollution released from the EMF Superfund site. The EMF site includes two phosphate processing plants (FMC Corporation and J.R. Simplot Company).

What were the results of ATSDR's study?

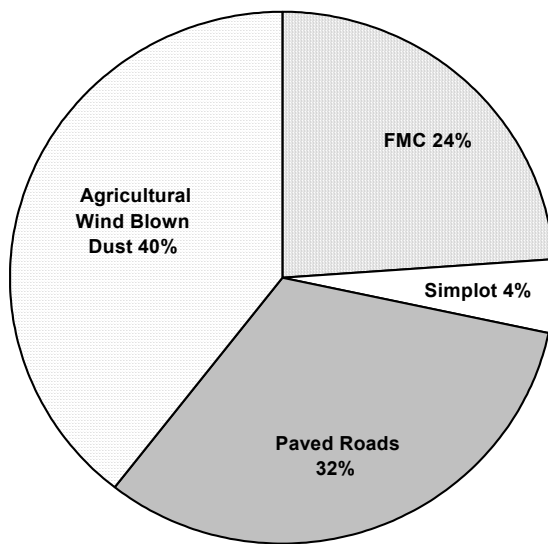
Since the 1970's, FMC and Simplot have released, and continue to release large amounts of toxic chemicals. These chemicals create air pollution. The air pollution travels mainly to the northeast because of weather patterns. It reaches almost every part of the EMF study area, including locations in Chubbuck, Pocatello, and parts of the Fort Hall Indian Reservation. The largest amount of air pollution occurs on the Reservation and is mostly due to FMC's releases of chemicals. The chemicals released to the air by both facilities decrease in amount the further they travel away from them.

Is poor air quality a possible public health hazard?

Air emissions from Simplot and FMC contain particulate matter (PM) and sulfur dioxides. The air pollution caused by PM and sulfur dioxides has reached unhealthy levels since 1975 and will continue to be a health problem until emissions are reduced. Exposure to PM and sulfur dioxides is linked to an increased risk of upper respiratory illness and asthma. ATSDR found that emissions from Simplot and FMC are two of the causes of poor air quality in the EMF study area.



Percent of Particulate Matter From Local Sources



What are the health effects of poor air quality?

PM can go deep into the lungs triggering asthma attacks and causing upper respiratory illness, pneumonia, and chronic bronchitis. The most sensitive population which includes children, people with asthma, lung disease, heart disease, the elderly, and smokers are most at risk for adverse health effects from air pollution. Inversions, periods of calm air with freezing temperatures and at least 70% humidity, can cause episodes of poor air quality. During inversions, PM, sulfur dioxide, and other chemicals become trapped close to the ground. They increase in amounts as they are released and reach potentially unhealthy levels. These unhealthy levels create a risk for adverse health effects, especially for sensitive people.

What preventative actions can I take?

During inversions and periods of poor air quality, call the Idaho Department of Environmental Quality (IDEQ) or log on to the Web site at <http://www.deq.state.id.us/air/air1.htm> and check the air quality index. People living in the EMF area, especially sensitive people, should stay indoors and avoid air pollution and moderate exercise during periods of poor air quality. Exercise that keeps your heart rate between 55-75% of your maximum heart rate is considered moderate. To calculate the heart rate you need to stay below to avoid moderate exercise, subtract your age from 220 and multiply by 0.55 ($[220 - \text{age}] \times 0.55$).

What still needs to be done?

ATSDR recommends the following actions for the future:

- Keep checking air quality in the EMF study area.
- Set up an additional air monitor station in the southern-most area of the Fort Hall Indian Reservation.
- Encourage people to follow air quality advisories from the IDEQ, especially sensitive people.
- Lower air pollution emissions and enforce air quality standards.

For more information:

The Bureau of Community and Environmental Health (BCEH), Idaho Division of Health, works with ATSDR to protect human health from dangerous substances in the environment. The Bureau has a program to inform and educate the citizens of Idaho about these substances at Superfund sites and the activities being conducted at these sites. This fact sheet has been created to assist you in understanding what ATSDR is doing relating to the Eastern Michaud Flats site.

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